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(FILE 'HOME' ENTERED AT 09:20:35 ON 15 AUG 2007)

FILE 'CAPLUS, MEDLINE, EMBASE, BIOSIS, SCISEARCH' ENTERED AT 09:21:18 ON
15 AUG 2007

L1	112	SEA	ABB=ON	PLU=ON	QIN NING/AU
L2	11	SEA	ABB=ON	PLU=ON	CODD ELLEN/AU
L3	11	DUP	REM L2	(0 DUPLICATES REMOVED)	
		DIS	L3 1-11	TI	SO
L4	2	SEA	ABB=ON	PLU=ON	"ALPHA2 DELTA CALCIUM CHANNEL SUBUNIT"
L5	2	DUP	REM L4	(0 DUPLICATES REMOVED)	
		DIS	L5 1-2	IBIB	ABS
L6	2	SEA	ABB=ON	PLU=ON	"ALPHA DELTA CALCIUM CHANNEL"
L7	1094	SEA	ABB=ON	PLU=ON	ALPHA (S) DELTA (S) CALCIUM (S) CHANNEL
L8	19254	SEA	ABB=ON	PLU=ON	GABAPENTIN OR NEURONTIN
L9	373	SEA	ABB=ON	PLU=ON	L7 AND L8
L10	303	SEA	ABB=ON	PLU=ON	L7 (P) L8
L11	191	SEA	ABB=ON	PLU=ON	L7 (S) L8
L12	67	SEA	ABB=ON	PLU=ON	L11 AND HUMAN
L13	46	DUP	REM L12	(21 DUPLICATES REMOVED)	
		DIS	L13 20-46	TI	SO AU

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	19	Qin adj Ning	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/08/15 09:10
L2	52	Codd adj Ellen	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/08/15 09:11
L3	705	"voltage gated calcium channel"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/08/15 09:12
L4	83	"alpha 2 delta subunit"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/08/15 09:13
L5	22	I3 and I4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/08/15 09:15
L6	1	"alpha 2 delta 4 subunit"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/08/15 09:16
L7	0	"alpha 2 delta 4 calcium channel"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/08/15 09:17
L8	6	"alpha2 delta4 calcium channel"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/08/15 09:17

Seq ID # 10

<!--StartFragment-->RESULT 3

AA92321

ID AAY92321 standard; protein; 1120 AA.

XX

AC AAY92321;

XX

DT 10-AUG-2000 (first entry)

XX

DE Human alpha-2-delta-D calcium channel subunit.

XX

KW alpha-2-delta-D; calcium channel subunit; 3p21.1; gabapentin; cytostatic;
KW anticonvulsant; antimigrane; antiparkinsonian; antidepressant.

XX

OS Homo sapiens.

XX

PN WO200020450-A2.

XX

PD 13-APR-2000.

XX

PF 07-OCT-1999; 99WO-US023519.

XX

PR 07-OCT-1998; 98US-0103322P.

PR 30-OCT-1998; 98US-0106473P.

PR 29-DEC-1998; 98US-0114088P.

XX

PA (WARN) WARNER LAMBERT CO.

XX

PI Johns MA, Moldover B, Offord JD;

XX

DR WPI; 2000-303744/26.

DR N-PSDB; AAA09254.

XX

PT New human nucleic acids encoding the alpha2delta-C and alpha2delta-D
PT proteins, useful in the treatment of epilepsy, migraine, chronic pain,
PT anxiety, multiple sclerosis or cancer.

XX

PS Claim 8; Page 67; 88pp; English.

XX

CC The alpha-2-delta-D gene encodes a calcium channel subunit polypeptide.
 CC The gene has been mapped to chromosome 12p13.1. This gene and the related
 CC alpha-2-delta-C and -B genes are useful for protecting mammalian cells
 CC from abnormal calcium flux by introducing expression vectors containing
 CC the respective gene into mammalian cells. The antisense genes are also
 CC useful for treating or preventing epilepsy. The alpha-delta-2-A protein
 CC is a high-affinity binding target of the anti-convulsant drug gabapentin.
 CC Therefore, alpha-delta-2 proteins may also be targeted to treat seizure-
 CC related syndromes, migraine, ataxia, vestibular defects, chronic pain,
 CC sleep interference, anxiety, amyotrophic lateral sclerosis (ALS), multiple
 CC sclerosis, mania, tremor, parkinsonism, substance abuse or addiction
 CC syndromes, mood, depression or cancer

XX

SQ Sequence 1120 AA;

Query Match 94.1%; Score 5386.5; DB 3; Length 1120;

Best Local Similarity 98.0%; Pred. No. 0;

Matches 1033; Conservative 5; Mismatches 13; Indels 3; Gaps 2;

Qy 11 DRVKLWADTFGGDLNTVTKYSGSLLLQKKYKDVESSLKIEEVDGLELVRKFSEDMENML 70

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 Db 58 ETVKLWADTFGGDLNTVTKYSGSLLLQKKYKDVESSLKIEEVDGLELVRKFSEDMENML 117

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Qy	71	RRKVEAVQNLVEAAEEADLNHEFNESLVFDYNSVLINERDEKGNFVELGAEFLLSNHAH	130
Db	118	RRKVEAVQNLVEAAEEADLNHEFNESLVFDYNSVLINERDEKGNFVELGAEFLLSNHAH	177
Qy	131	FSNLPVNTSISVVQLPTNVYNKDPDILNGVYMSEALNAVFVENFQRDPTLTWQYFGSATG	190
Db	178	FSNLPVNTSISVVQLPTNVYNKDPDILNGVYMSEALNAVFVENFQRDPTLTWQYFGSATG	237
Qy	191	FFRIYPGIKWTPDENGVITFDICRNRGWYIQAATSPKDIVILVDVSGSMKGLRMTIAKHTI	250
Db	238	FFRIYPGIKWTPDENGVITFDICRNRGWYIQAATSPKDIVILVDVSGSMKGLRMTIAKHTI	297
Qy	251	TTILDTLGENDFVNI IAYNDYVHYIEPCFKGILVQADRDNREHFKLLVEELMVKGVGVD	310
Db	298	TTILDTLGENDFVNI IAYNDYVHYIEPCFKGILVQADRDNREHFKLLVEELMVKGVGVD	357
Qy	311	QALREAFQILKQFQEAQGSCLNQAIMLISDGAVEDYEPVFEKYNWPDCKVRVFTYLIGR	370
Db	358	QALREAFQILKQFQEAQGSCLNQAIMLISDGAVEDYEPVFEKYNWPDCKVRVFTYLIGR	417
Qy	371	EVSFADRMKWIACNNKGYTQISTLADTQENVMEYLHVLSRPMVINHDHDIWTEAYMDS	430
Db	418	EVSFADRMKWIACNNKGYTQISTLADTQENVMEYLHVLSRPMVINHDHDIWTEAYMDS	477
Qy	431	KLLSSQAQSLTLLTTVAMPVFSKKNETRSHGILLGVVGSVALRELMKLAPRYKLGVBHY	490
Db	478	KLLSSQAQSLTLLTTVAMPVFSKKNETRSHGILLGVVGSVALRELMKLAPRYKLGVBHY	537
Qy	491	AFLNTNNGYILSHPDRLPLYREGKKLKPKPNYNSVDLSEVEWEDQAESLRTAMINRETGT	550
Db	538	AFLNTNNGYILSHPDRLPLYREGKKLKPKPNYNSVDLSEVEWEDQAESLRTAMINRETGT	597
Qy	551	LSMDVKVPMDKGKRVFLFTNDYFFTDISDTPFSLGAVLSRGHGEYILLGNTSVEEGLHDL	610
Db	598	LSMDVKVPMDKGKRVFLFTNDYFFTDISDTPFSLGAVLSRGHGEYILLGNTSVEEGLHDL	657
Qy	611	LHPDLALAGDWIYCITDIDPDHRKLSQLEAMIRFLTRKDPDLECEELVREVLFDVAVTA	670
Db	658	LHPDLALAGDWIYCITDIDPDHRKLSQLEAMIRFLTRKDPDLECEELVREVLFDVAVTA	717
Qy	671	PMEAYWTALALNMSESESHVVDMAFLGTRAGLLRSSLFVGSEKVS DRKFLTPEDASVFT	730
Db	718	PMEAYWTALALNMSESESHVVDMAFLGTRAGLLRSSLFVGSEKVS DRKFLTPEDASVFT	777
Qy	731	LDRFPLWYRQASEHPAGSFVFNLRWAEGPESAGEPMVVTASTAVAVTVDKRTAIAAAAGV	790
Db	778	LDRFPLWYRQASEHPAGSFVFNLRWAEGPESAGEPMVVTASTAVAVTVDKRTAIAAAAGV	837
Qy	791	QMKLEFLQKRFWAATRQCSTVDGPYTQSCEDSDLD CFVIDNNGFILISKRSRETGRFLGE	850
Db	838	QMKLEFLQKRFWAATRQCSTVDGPCTQSCEDSDLD CFVIDNNGFILISKRSRETGRFLGE	897
Qy	851	VDGAVLTQLLSMGVFSQVTMYDYQAMCKPSSHHSAAQPLVSPISAFLTATRWLLQELVL	910
Db	898	VDGAVLTQLLSMGVFSQVTMYDYQAMCKPSSHHSAAQPLVSPISAFLTATRWLLQELVL	957
Qy	911	FLLEWSVWGSWYDRGAEAKSVFHSHKHKKQDPLQPCDTEYPVFVYQPAIREANGIVECG	970
Db	958	FLLEWSVWGSWYDRGAEAKSVFHSHKHKKQDPLQPCDTEYPVFVYQPAIREANGIVECG	1017
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Db      1018 PCQKVFFVQQIPNSNLLLLVTDPTCDCSIFPPVLQEATEVKYNASVKCDRMRSQKLRRRP 1077
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Qy      1031 DSCHAFHPEVRVEADRGWAGFSSPNP--LCLGLC 1062
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seq ID #9
nucleic acid

<!--StartFragment-->RESULT 3

AAA09254

ID AAA09254 standard; cDNA; 5073 BP.

XX

AC AAA09254;

XX

DT 10-AUG-2000 (first entry)

XX

DE Human alpha-2-delta-D gene.

XX

KW alpha-2-delta-D; calcium channel; 12p13.3; gabapentin; cytostatic;

KW anticonvulsant; antimigrane; antiparkinsonian; antidepressant; ss.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT CDS 3..3365

FT /*tag= a

XX

PN WO200020450-A2.

XX

PD 13-APR-2000.

XX

PF 07-OCT-1999; 99WO-US023519.

XX

PR 07-OCT-1998; 98US-0103322P.

PR 30-OCT-1998; 98US-0106473P.

PR 29-DEC-1998; 98US-0114088P.

XX

PA (WARN) WARNER LAMBERT CO.

XX

PI Johns MA, Moldover B, Offord JD;

XX

DR WPI; 2000-303744/26.

DR P-PSDB; AAY92321.

XX

PT New human nucleic acids encoding the alpha2delta-C and alpha2delta-D

PT proteins, useful in the treatment of epilepsy, migraine, chronic pain,

PT anxiety, multiple sclerosis or cancer.

XX

PS Claim 1; Page 64-66; 88pp; English.

XX

CC The alpha-2-delta-D gene encodes a calcium channel subunit polypeptide.

CC The gene has been mapped to chromosome 12p13.1. This gene and the related

CC alpha-2-delta-C and -B genes are useful for protecting mammalian cells

CC from abnormal calcium flux by introducing expression vectors containing

CC the respective gene into mammalian cells. The antisense genes are also

CC useful for treating or preventing epilepsy. The alpha-delta-2-A protein

CC is a high-affinity binding target of the anti-convulsant drug gabapentin.

CC Therefore, alpha-delta-2 proteins may also be targeted to treat seizure-

CC related syndromes, migraine, ataxia, vestibular defects, chronic pain,

CC sleep interference, anxiety, amyotrophic lateral sclerosis (ALS), multiple

CC sclerosis, mania, tremor, parkinsonism, substance abuse or addiction

CC syndromes, mood, depression or cancer

XX

SQ Sequence 5073 BP; 1280 A; 1390 C; 1347 G; 1056 T; 0 U; 0 Other;

Query Match 88.5%; Score 3085.6; DB 3; Length 5073;

Best Local Similarity 98.8%; Pred. No. 0;

Matches 3109; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

225
179

QY	219	GGACAGAGTGAAGCTATGGGCTGACACCTTCGGCGGGGACCTGTATAAACTGTGACCAA	278
Db	173	GGAAACAGTGAAGCTATGGGCTGACACCTTCGGCGGGGACCTGTATAAACTGTGACCAA	232
QY	279	ATACTCAGGCTCTCTCTTGCTGCAGAAGAAGTACAAGGATGTGGAGTCCAGTCTGAAGAT	338
Db	233	ATACTCAGGCTCTCTCTTGCTGCAGAAGAAGTACAAGGATGTGGAGTCCAGTCTGAAGAT	292
QY	339	CGAGGAGGTGGATGGCTTGGAGCTGGTGAGGAAGTTCTCAGAGGACATGGAGAACATGCT	398
Db	293	CGAGGAGGTGGATGGCTTGGAGCTGGTGAGGAAGTTCTCAGAGGACATGGAGAACATGCT	352
QY	399	GCGGAGGAAAGTCGAGGCGGTCCAGAATCTGGTGGAAGCTGCCGAGGAGGCCGACCTGAA	458
Db	353	GCGGAGGAAAGTCGAGGCGGTCCAGAATCTGGTGGAAGCTGCCGAGGAGGCCGACCTGAA	412
QY	459	CCACGAATTCAATGAATCCCTGGTGTTCGACTATTACAACCTCGGTCCTGATCAACGAGAG	518
Db	413	CCACGAATTCAATGAATCCCTGGTGTTCGACTATTACAACCTCGGTCCTGATCAACGAGAG	472
QY	519	GGACGAGAAGGGCAACTTCGTGGAGCTGGGCGCCGAGTTCCTCCTGGAGTCCAATGCTCA	578
Db	473	GGACGAGAAGGGCAACTTCGTGGAGCTGGGCGCCGAGTTCCTCCTGGAGTCCAATGCTCA	532
QY	579	CTTCAGCAACCTGCCGGTGAACACCTCCATCAGCAGCGTGCAGCTGCCACCAACGTGTA	638
Db	533	CTTCAGCAACCTGCCGGTGAACACCTCCATCAGCAGCGTGCAGCTGCCACCAACGTGTA	592
QY	639	CAACAAAGACCCAGATATTTTAAATGGAGTCTACATGTCTGAAGCCTTGAATGCTGTCTT	698
Db	593	CAACAAAGACCCAGATATTTTAAATGGAGTCTACATGTCTGAAGCCTTGAATGCTGTCTT	652
QY	699	CGTGAGAGAACTTCCAGAGAGACCCAACGTTGACCTGGCAATATTTTGGCAGTGCAACTGG	758
Db	653	CGTGAGAGAACTTCCAGAGAGACCCAACGTTGACCTGGCAATATTTTGGCAGTGCAACTGG	712
QY	759	ATTCTTCAGGATCTATCCAGGTATAAAATGGACACCTGATGAGAATGGAGTCATTACTTT	818
Db	713	ATTCTTCAGGATCTATCCAGGTATAAAATGGACACCTGATGAGAATGGAGTCATTACTTT	772
QY	819	TGACTGCCGAAACCGCGGCTGGTACATTCAAGCTGCTACTTCTCCCAAGGACATAGTGAT	878
Db	773	TGACTGCCGAAACCGCGGCTGGTACATTCAAGCTGCTACTTCTCCCAAGGACATAGTGAT	832
QY	879	TTTGGTGAGCGTGAGCGGCAGTATGAAGGGGCTGAGGATGACTATTGCCAAGCACACCAT	938
Db	833	TTTGGTGAGCGTGAGCGGCAGTATGAAGGGGCTGAGGATGACTATTGCCAAGCACACCAT	892
QY	939	CACCACCATCTTGACACCCCTGGGGGAGAATGACTTCGTTAATATCATAGCGTACAATGA	998
Db	893	CACCACCATCTTGACACCCCTGGGGGAGAATGACTTCGTTAATATCATAGCGTACAATGA	952
QY	999	CTACGTCCATTACATCGAGCCTTGTTTTAAAGGGATCCTCGTCCAGGCGGACCGAGACAA	1058
Db	953	CTACGTCCATTACATCGAGCCTTGTTTTAAAGGGATCCTCGTCCAGGCGGACCGAGACAA	1012
QY	1059	TCGAGAGCATTTCAAACCTGCTGGTGGAGGAGTTGATGGTCAAAGGTGTGGGGGTCTGGA	1118
Db	1013	TCGAGAGCATTTCAAACCTGCTGGTGGAGGAGTTGATGGTCAAAGGTGTGGGGGTCTGGA	1072
QY	1119	CCAAGCCCTGAGAGAAGCCTTCCAGATCCTGAAGCAGTTCCAAGAGGCCAAGCAAGGAAG	1178

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Db 1073 CCAAGCCCTGAGAGAAGCCTTCCAGATCCTGAAGCAGTTCCAAGAGGCCAAGCAAGGAAG 1132

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Db 1133 CCTCTGCAACCAGGCCATCATGCTCATCAGCGACGGCGCCGTGGAGGACTACGAGCCGGT 1192

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Db 1193 GTTTGAGAAGTATAACTGGCCAGACTGTAAGGTCCGAGTTTTCTACTTACCTCATTGGGAG 1252

Qy 1299 AGAAGTGTCTTTTGCTGACCGCATGAAGTGGATTGCATGCAACAACAAAGGCTACTACAC 1358

Db 1253 AGAAGTGTCTTTTGCTGACCGCATGAAGTGGATTGCATGCAACAACAAAGGCTACTACAC 1312

Qy 1359 GCAGATCTCAACGCTGGCGGACACCCAGGAGAACGTGATGGAATACCTGCACGTGCTCAG 1418

Db 1313 GCAGATCTCAACGCTGGCGGACACCCAGGAGAACGTGATGGAATACCTGCACGTGCTCAG 1372

Qy 1419 CCGCCCCATGGTCATCAACCACGACCACGACATCATCTGGACAGAGGCCTACATGGACAG 1478

Db 1373 CCGCCCCATGGTCATCAACCACGACCACGACATCATCTGGACAGAGGCCTACATGGACAG 1432

Qy 1479 CAAGCTCCTCAGCTCGCAGGCTCAGAGCCTGACACTGCTCACCCTGTGGCCATGCCAGT 1538

Db 1433 CAAGCTCCTCAGCTCGCAGGCTCAGAGCCTGACACTGCTCACCCTGTGGCCATGCCAGT 1492

Qy 1539 CTTTCAGCAAGAAGAACGAAACGCGATCCCATGGCATTCTCCTGGGTGTGGTGGGCTCAGA 1598

Db 1493 CTTTCAGCAAGAAGAACGAAACGCGATCCCATGGCATTCTCCTGGGTGTGGTGGGCTCAGA 1552

Qy 1599 TGTGGCCCTGAGAGAGCTGATGAAGCTGGCGCCCCGGTACAAGCTTGGAGTGCACGGATA 1658

Db 1553 TGTGGCCCTGAGAGAGCTGATGAAGCTGGCGCCCCGGTACAAGCTTGGAGTGCACGGATA 1612

Qy 1659 CGCCTTTCTGAACACCAACAATGGCTACATCCTCTCCCATCCCGACCTCCGGCCCCCTGTA 1718

Db 1613 CGCCTTTCTGAACACCAACAATGGCTACATCCTCTCCCATCCCGACCTCCGGCCCCCTGTA 1672

Qy 1719 CAGAGAGGGGAAGAACTAAAACCCAAACCTAACTACAACAGTGTGGATCTCTCCGAAGT 1778

Db 1673 CAGAGAGGGGAAGAACTAAAACCCAAACCTAACTACAACAGTGTGGATCTCTCCGAAGT 1732

Qy 1779 GGAGTGGGAAGACCAGGCTGAATCTCTGAGAACAGCCATGATCAATAGGGAACAGGTAC 1838

Db 1733 GGAGTGGGAAGACCAGGCTGAATCTCTGAGAACAGCCATGATCAATAGGGAACAGGTAC 1792

Qy 1839 TCTCTCGATGGATGTGAAGGTTCCGATGGATAAAGGGAAGCGAGTTCTTTCTCTGACCAA 1898

Db 1793 TCTCTCGATGGATGTGAAGGTTCCGATGGATAAAGGGAAGCGAGTTCTTTCTCTGACCAA 1852

Qy 1899 TGA TACTTCTTCACGGACATCAGCGACACCCCTTTCAGTTTGGGGGCGGTGCTGTCCCG 1958

Db 1853 TGA TACTTCTTCACGGACATCAGCGACACCCCTTTCAGTTTGGGGGCGGTGCTGTCCCG 1912

Qy 1959 GGGCCACGGAGAATACATCCTTCTGGGGAACACGTCTGTGGAAGAAGGCCTGCATGACTT 2018

Db 1913 GGGCCACGGAGAATACATCCTTCTGGGGAACACGTCTGTGGAAGAAGGCCTGCATGACTT 1972

Qy 2019 GCTTCACCCAGACCTGGCCCTGGCCGGTGACTGGATCTACTGCATCAGATATTGACCC 2078

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Db	1973	GCTTCACCCAGACCTGGCCCTGGCCGGTGACTGGATCTACTGCATCACAGATATTGACCC	2032
QY	2079	AGACCACCGGAAGCTCAGCCAGCTAGAGGCCATGATCCGCTTCCTCACCAGGAAGGACCC	2138
Db	2033	AGACCACCGGAAGCTCAGCCAGCTAGAGGCCATGATCCGCTTCCTCACCAGGAAGGACCC	2092
QY	2139	AGACCTGGAGTGTGACGAGGAGCTGGTCCGGGAGGTGCTGTTTGACGCGGTGGTGACAGC	2198
Db	2093	AGACCTGGAGTGTGACGAGGAGCTGGTCCGGGAGGTGCTGTTTGACGCGGTGGTGACAGC	2152
QY	2199	CCCCATGGAAGCCTACTGGACAGCGCTGGCCCTCAACATGTCCGAGGAGTCTGAACACGT	2258
Db	2153	CCCCATGGAAGCCTACTGGACAGCGCTGGCCCTCAACATGTCCGAGGAGTCTGAACACGT	2212
QY	2259	GGTGGACATGGCCTTCCTGGGCACCCGGGCTGGCCTCCTGAGAAGCAGCTTGTTTCGTGGG	2318
Db	2213	GGTGGACATGGCCTTCCTGGGCACCCGGGCTGGCCTCCTGAGAAGCAGCTTGTTTCGTGGG	2272
QY	2319	CTCCGAGAAGGTCTCCGACAGGAAGTTCCTGACACCTGAGGACGAGGCCAGCGTGTTTAC	2378
Db	2273	CTCCGAGAAGGTCTCCGACAGGAAGTTCCTGACACCTGAGGACGAGGCCAGCGTGTTTAC	2332
QY	2379	CCTGGACCGCTTCCCGCTGTGGTACCGCCAGGCCCTCAGAGCATCCTGCTGGCAGCTTCGT	2438
Db	2333	CCTGGACCGCTTCCCGCTGTGGTACCGCCAGGCCCTCAGAGCATCCTGCTGGCAGCTTCGT	2392
QY	2439	CTTCAACCTCCGCTGGGCAGAAAGGACCAGAAAGTGCGGGTGAACCCATGGTGGTGACGGC	2498
Db	2393	CTTCAACCTCCGCTGGGCAGAAAGGACCAGAAAGTGCGGGTGAACCCATGGTGGTGACGGC	2452
QY	2499	AAGCACAGCTGTGGCGGTGACCGTGGACAAGAGGACAGCCATTGCTGCAGCCGCGGGCGT	2558
Db	2453	AAGCACAGCTGTGGCGGTGACCGTGGACAAGAGGACAGCCATTGCTGCAGCCGCGGGCGT	2512
QY	2559	CCAAATGAAGCTGGAATTCTCCAGCGCAAATTCTGGGCGGCAACGCGGCAGTGCAGCAC	2618
Db	2513	CCAAATGAAGCTGGAATTCTCCAGCGCAAATTCTGGGCGGCAACGCGGCAGTGCAGCAC	2572
QY	2619	TGTGGATGGGCGGTACACACAGAGCTGCGAGGACAGTGATCTGGACTGCTTCGTTCATCGA	2678
Db	2573	TGTGGATGGGCGGTACACACAGAGCTGCGAGGACAGTGATCTGGACTGCTTCGTTCATCGA	2632
QY	2679	CAACAACGGGTTTCTGATCTCCAAGAGGTCCCGAGAGACGGGAAGATTTCTGGGGGA	2738
Db	2633	CAACAACGGGTTTCTGATCTCCAAGAGGTCCCGAGAGACGGGAAGATTTCTGGGGGA	2692
QY	2739	GGTGGATGGTGCTGTCTGACCCAGCTGCTCAGCATGGGGGTGTTTACGCCAAGTGACTAT	2798
Db	2693	GGTGGATGGTGCTGTCTGACCCAGCTGCTCAGCATGGGGGTGTTTACGCCAAGTGACTAT	2752
QY	2799	GTATGACTATCAGGCCATGTGCAAACCTCGAGTCACCACCACAGTGCAGCCCAGCCCCCT	2858
Db	2753	GTATGACTATCAGGCCATGTGCAAACCTCGAGTCACCACCACAGTGCAGCCCAGCCCCCT	2812
QY	2859	GGTCAGCCCAATTTCTGCCTTCTTGACGGCGACCAGGTGGCTGCTGCAGGAGCTGGTGCT	2918
Db	2813	GGTCAGCCCAATTTCTGCCTTCTTGACGGCGACCAGGTGGCTGCTGCAGGAGCTGGTGCT	2872
QY	2919	GTTCTGCTGGAGTGGAGTGTCTGGGGCTCCTGGTACGACAGAGGGGCCGAGGCCAAAAG	2978
Db	2873	GTTCTGCTGGAGTGGAGTGTCTGGGGCTCCTGGTACGACAGAGGGGCCGAGGCCAAAAG	2932

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Qy      2979 TGTCTTCCATCACTCCCACAAACACAAGAAGCAGGACCCGCTGCAGCCCTGCGACACGGA 3038
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Db      2933 TGTCTTCCATCACTCCCACAAACACAAGAAGCAGGACCCGCTGCAGCCCTGCGACACGGA 2992
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Qy      3039 GTACCCCGTGTTTCGTGTACCAGCCGGCCATCCGGGAGGCCAACGGGATCGTGAGTGCGG 3098
          |||
Db      2993 GTACCCCGTGTTTCGTGTACCAGCCGGCCATCCGGGAGGCCAACGGGATCGTGAGTGCGG 3052
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Qy      3099 GCCCTGCCAGAAGGTATTTGTGGTGCAGCAGATTCCCAACAGTAACCTCCTCCTCCTGGT 3158
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Qy      3159 GACAGACCCACCTGTGACTGCAGCATCTTCCCACAGTGCTGCAGGAGGCGACAGAAGT 3218
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Db      3113 GACAGACCCACCTGTGACTGCAGCATCTTCCCACAGTGCTGCAGGAGGCGACAGAAGT 3172
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Db      3173 CAAATATAATGCCTCTGTCAAATGTGACCGGATGCGCTCCCAGAAGCTCCGCCGGCGACC 3232
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Qy      3279 AGACTCCTGCCACGCCTTCCATCCAGAGGTGCGGGTTGAGGCGGATCGAGGGTGGGCTGG 3338
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Db      3233 AGACTCCTGCCACGCCTTCCATCCAGAGGAGAATGCCAGGACTGCGGCGGCCTCGGA 3292
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